

(FILE 'HOME' ENTERED AT 14:24:01 ON 13 MAR 2003)

FILE 'MEDLINE, CAPLUS, EMBASE, BIOSIS' ENTERED AT 14:24:13 ON 13 MAR 2003

| | |
|----|-------------------------------------------------------------------|
| L1 | 238 S IL-22 OR IL-22BP OR IL-22RA2 OR IL-TIF OR INTERLEUKIN-22 OR |
| C | |
| L2 | 105 DUP REM L1 (133 DUPLICATES REMOVED) |
| L3 | 14 S ZCYTOR16 OR ZCYTOR11 |
| L4 | 8 DUP REM L3 (6 DUPLICATES REMOVED) |
| L5 | 0 S L2 AND MES |
| L6 | 32 S L2 AND PY<2001 |

L6 ANSWER 1 OF 32 MEDLINE
 ACCESSION NUMBER: 2001223439 MEDLINE
 DOCUMENT NUMBER: 21069354 PubMed ID: 11197690
 TITLE: IL-TIF/IL-22:
 genomic organization and mapping of the human and mouse
 genes.
 AUTHOR: Dumoutier L; Van Roost E; Ameye G; Michaux L; Renauld J C
 CORPORATE SOURCE: Ludwig Institute for Cancer Research, Brussels Branch,
 Experimental Medicine Unit, Christian de Duve Institute of
 Cellular Pathology, Brussels, Belgium.
 SOURCE: GENES AND IMMUNITY, (2000 Dec) 1 (8) 488-94.
 Journal code: 100953417. ISSN: 1466-4879.
 PUB. COUNTRY: England: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200104
 ENTRY DATE: Entered STN: 20010502
 Last Updated on STN: 20010502
 Entered Medline: 20010426

L6 ANSWER 2 OF 32 MEDLINE
 ACCESSION NUMBER: 2001023984 MEDLINE
 DOCUMENT NUMBER: 20469498 PubMed ID: 10875937
 TITLE: Interleukin (IL)-22, a novel human
 cytokine that signals through the interferon
 receptor-related proteins CRF2-4 and
 IL-22R.
 AUTHOR: Xie M H; Aggarwal S; Ho W H; Foster J; Zhang Z; Stinson J;
 Wood W I; Goddard A D; Gurney A L
 CORPORATE SOURCE: Department of Molecular Biology, Genentech, Inc., South
 San
 Francisco, California 94080, USA.
 SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2000 Oct 6) 275
 (40) 31335-9.
 Journal code: 2985121R. ISSN: 0021-9258.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 OTHER SOURCE: GENBANK-AF279437; GENBANK-AF286095
 ENTRY MONTH: 200011
 ENTRY DATE: Entered STN: 20010322
 Last Updated on STN: 20010322
 Entered Medline: 20001113

L6 ANSWER 4 OF 32 MEDLINE
 ACCESSION NUMBER: 2000474382 MEDLINE
 DOCUMENT NUMBER: 20420346 PubMed ID: 10954742
 TITLE: Human interleukin-10-related T cell-derived inducible
 factor: molecular cloning and functional characterization
 as an hepatocyte-stimulating factor.
 AUTHOR: Dumoutier L; Van Roost E; Colau D; Renauld J C
 CORPORATE SOURCE: Ludwig Institute for Cancer Research, Brussels Branch and
 the Experimental Medicine Unit, Christian de Duve
 Institute
 of Cellular Pathology, Universite Catholique de Louvain,
 Avenue Hippocrate 74, B1200-Brussels, Belgium.
 SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE
 UNITED STATES OF AMERICA, (2000 Aug 29) 97 (18)

10144-9.
Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AJ277247
ENTRY MONTH: 200010
ENTRY DATE: Entered STN: 20001012
Last Updated on STN: 20001012
Entered Medline: 20001005

L6 ANSWER 5 OF 32 MEDLINE
ACCESSION NUMBER: 2000126044 MEDLINE
DOCUMENT NUMBER: 20126044 PubMed ID: 10657629
TITLE: Cloning and characterization of IL-10-related T
cell-derived inducible factor (**IL-TIF**),
a novel cytokine structurally related to IL-10 and
inducible by IL-9.
AUTHOR: Dumoutier L; Louahed J; Renauld J C
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Brussels, Belgium.
SOURCE: JOURNAL OF IMMUNOLOGY, (2000 Feb 15) 164 (4)
1814-9.
Journal code: 2985117R. ISSN: 0022-1767.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
OTHER SOURCE: GENBANK-AJ249491; GENBANK-AJ249492
ENTRY MONTH: 200003
ENTRY DATE: Entered STN: 20000320
Last Updated on STN: 20000320
Entered Medline: 20000309

L6 ANSWER 12 OF 32 MEDLINE
ACCESSION NUMBER: 97199375 MEDLINE
DOCUMENT NUMBER: 97199375 PubMed ID: 9047351
TITLE: **CRF2-4**: isolation of cDNA clones
encoding the human and mouse proteins.
AUTHOR: Gibbs V C; Pennica D
CORPORATE SOURCE: Department of Surgery, San Francisco VA Medical Center, CA
94131, USA.. gibbs.verna@sanfrancisco.va.gov
CONTRACT NUMBER: R03 DK45172 (NIDDK)
SOURCE: GENE, (1997 Feb 20) 186 (1) 97-101.
Journal code: 7706761. ISSN: 0378-1119.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-U53696
ENTRY MONTH: 199703
ENTRY DATE: Entered STN: 19970414
Last Updated on STN: 19970414
Entered Medline: 19970331

L6 ANSWER 19 OF 32 MEDLINE
ACCESSION NUMBER: 93300510 MEDLINE
DOCUMENT NUMBER: 93300510 PubMed ID: 8314576
TITLE: A new member of the cytokine receptor gene family maps on
chromosome 21 at less than 35 kb from IFNAR.

AUTHOR: Lutfalla G; Gardiner K; Uze G
 CORPORATE SOURCE: Laboratory of Viral Oncology, IRSC, CNRS, Villejuif, France.
 CONTRACT NUMBER: HD 17449 (NICHHD)
 HG 00001 (NHGRI)
 SOURCE: GENOMICS, (1993 May) 16 (2) 366-73.
 Journal code: 8800135. ISSN: 0888-7543.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 OTHER SOURCE: GENBANK-Z17227
 ENTRY MONTH: 199307
 ENTRY DATE: Entered STN: 19930813
 Last Updated on STN: 19980206
 Entered Medline: 19930726

L6 ANSWER 20 OF 32 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2001:693806 CAPLUS
 DOCUMENT NUMBER: 135:271906
 TITLE: Human interleukin-21 and -22 and cDNAs and their use in diagnosis and therapy
 INVENTOR(S): Ebner, Reinhard; Ruben, Steven M.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 87 pp., Cont.-in-part of U.S. Ser. No. 320,713.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| US 2001023070 | A1 | 20010920 | US 2000-731816 | 20001208 |
| WO 9961617 | A1 | 19991202 | WO 1999-US11644 | 19990527 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2003003545 | A1 | 20030102 | US 1999-320713 | 19990527 |
| PRIORITY APPLN. INFO.: | | | US 1998-87340P | P 19980529 |
| | | | US 1999-131965P | P 19990430 |
| | | | US 1999-320713 | A2 19990527 |
| | | | WO 1999-US11644 | W 19990527 |
| | | | US 1999-169837P | P 19991209 |
| | | | US 1998-99805P | P 19980910 |

L6 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:493680 CAPLUS
 DOCUMENT NUMBER: 133:115924
 TITLE: Cloning of human interleukin-20 (IL-20) cDNA and its therapeutic use
 INVENTOR(S): Ebner, Reinhard; Murphy, Marianne; Ruben, Steven M.; Hu, Jing-shan; Duan, D. Roxanne; Florence, Kimberly;

PATENT ASSIGNEE(S): Rosen, Craig A.
SOURCE: Human Genome Sciences, Inc., USA
PCT Int. Appl., 153 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------|-----------------|--------------|
| WO 2000042189 | A1 | 20000720 | WO 2000-US807 | 20000114 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6486301 | B1 | 20021126 | US 1999-231788 | 19990115 |
| PRIORITY APPLN. INFO.: | | | US 1999-231788 | A 19990115 |
| | | | US 1997-52870P | P 19970716 |
| | | | US 1997-55952P | P 19970818 |
| | | | US 1997-60140P | P 19970926 |
| | | | US 1998-115832 | A2 19980715 |
| REFERENCE COUNT: | 2 | THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE | | |
| FORMAT | | | | |

L6 ANSWER 23 OF 32 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:764195 CAPLUS
DOCUMENT NUMBER: 132:9658
TITLE: Human interleukins-21 and 22 and cDNAs and methods of diagnosis and disease treatment
INVENTOR(S): Ruben, Steven M.; Ebner, Reinhard
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: PCT Int. Appl., 170 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| WO 9961617 | A1 | 19991202 | WO 1999-US11644 | 19990527 <-- |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2329274 | AA | 19991202 | CA 1999-2329274 | 19990527 <-- |
| AU 9942087 | A1 | 19991213 | AU 1999-42087 | 19990527 <-- |
| EP 1082433 | A1 | 20010314 | EP 1999-925886 | 19990527 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

IE, FI
 JP 2002516103 T2 20020604 JP 2000-551001 19990527
 US 2001023070 A1 20010920 US 2000-731816 20001208
 PRIORITY APPLN. INFO.: US 1998-87340P P 19980529
 US 1998-99805P P 19980910
 US 1999-131965P P 19990430
 US 1999-320713 A2 19990527
 WO 1999-US11644 W 19990527
 US 1999-169837P P 19991209
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT
 L6 ANSWER 25 OF 32 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1995:366030 CAPLUS
 DOCUMENT NUMBER: 122:130738
 TITLE: A novel cytoplasmic homology domain in interferon
 receptors
 AUTHOR(S): Mullersman, Jerald E.; Pfeffer, Lawrence M.
 CORPORATE SOURCE: Dep. Pathology, Univ. Tennessee Health Science
 Center,
 SOURCE: Memphis, TN, 38163, USA
 Trends in Biochemical Sciences (1995),
 20(2), 55-6
 CODEN: TBSCDB; ISSN: 0376-5067
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:754535 CAPLUS

DOCUMENT NUMBER: 137:277811

TITLE: Human cytokine receptor **Zcytor16**,
polynucleotides, chimeric proteins, and antibodies

for

diagnosis and therapy of inflammation and cancer

INVENTOR(S): Presnell, Scott R.; Xu, Wenfeng; Kindsvogel, Wayne;
Chen, Zhi; Hughes, Steven D.

PATENT ASSIGNEE(S): Zymogenetics, Inc., USA

SOURCE: PCT Int. Appl., 268 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002077174 | A2 | 20021003 | WO 2002-US8811 | 20020322 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-279222P P 20010327

AB The present invention provides a new human cytokine receptor designated
as

"**Zcytor16**", its chimeric or heterodimeric or multimeric derivs.,
polynucleotides, and antibodies. These **Zcytor16** cytokine
receptor related mols. are useful in both basic research and as
therapeutics for treating and diagnosing inflammation, immune disease,
infection, anemia, hematopoietic and other cancers.

L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:696089 CAPLUS

DOCUMENT NUMBER: 137:231372

TITLE: Mouse cytokine receptor **Zcytor16**,
polynucleotides, and antagonistic antibodies for
suppressing inflammation and diagnosing cancer

INVENTOR(S): Presnell, Scott R.; Xu, Wenfeng; Kindsvogel, Wayne;
Chen, Zhi

PATENT ASSIGNEE(S): Zymogenetics, Inc., USA

SOURCE: PCT Int. Appl., 221 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002070655 | A2 | 20020912 | WO 2002-US6267 | 20020304 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
 UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-273035P P 20010302
 US 2001-279232P P 20010327

AB Cytokine and their receptors have proven usefulness in both basic research, animal models, and as therapeutics. The present invention provides a new cytokine receptor designated as "mouse **Zcytor16**" which can bind and antagonize the IL-TIF cytokine. Sol. cytokine receptors (e.g. **Zcytor16** receptor, CRF2-4 receptor, IL-10 receptor and **Zcytor11** receptor) are useful for inhibiting IL-TIF-induced proliferation or differentiation of hematopoietic cell and hematopoietic progenitor cells, and for suppressing IL-TIF-induced or IL-9-induced inflammatory responses. Labeled antibodies and polynucleotides of **Zcytor16** receptor are useful for detecting cancer.

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:123081 CAPLUS
 DOCUMENT NUMBER: 136:182472
 TITLE: Soluble zcytor 11 cytokine receptors
 INVENTOR(S): Kindsvogel, Wayne R.; Topouzis, Stavros
 PATENT ASSIGNEE(S): Zymogenetics, Inc., USA
 SOURCE: PCT Int. Appl., 117 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|------------|
| WO 2002012345 | A2 | 20020214 | WO 2001-US24838 | 20010808 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001090524 | A5 | 20020218 | AU 2001-90524 | 20010808 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2000-223827P | P 20000808 |
| | | | US 2000-250876P | P 20001201 |
| | | | WO 2001-US24838 | W 20010808 |

AB Novel polypeptide combinations, polynucleotides encoding the polypeptides, and related compns. and methods are disclosed for sol. zcytor 11 receptors that may be used as novel cytokine antagonists, and within methods for detecting ligands that stimulate the proliferation and/or development of hematopoietic, lymphoid and myeloid cells in vitro and in vivo. The sol. **zcytor11** receptor may be a heterodimeric or multimeric receptor complex also comprising sol. IL10 receptor, sol. CRF2-4 receptor, or sol. DIRS1 receptor. Ligand-binding receptor polypeptides and antibodies can also be used to block TIF activity in vitro and in vivo, and may be used

in conjunction with TIF and other cytokines to selectively stimulate the immune system. The present invention also includes methods for producing the protein and use of the sol. receptor and antibodies for treating cancer, infection, inflammation, autoimmune disease, etc.

L4 ANSWER 4 OF 8 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002471904 MEDLINE
DOCUMENT NUMBER: 22206535 PubMed ID: 12087100
TITLE: Interleukin-22 (IL-22) activates the JAK/STAT, ERK, JNK, and p38 MAP kinase pathways in a rat hepatoma cell line. Pathways that are shared with and distinct from IL-10.
AUTHOR: Lejeune Diane; Dumoutier Laure; Constantinescu Stefan; Kruijer Wiebe; Schuringa Jan Jacob; Renauld Jean-Christophe
CORPORATE SOURCE: Ludwig Institute for Cancer Research, Brussels Branch, Experimental Medicine Unit, Universite de Louvain, avenue Hippocrate 74, B-1200 Brussels, Belgium.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (2002 Sep 13) 277 (37) 33676-82.
JOURNAL code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200212
ENTRY DATE: Entered STN: 20020918
Last Updated on STN: 20030105
Entered Medline: 20021203
AB IL (interleukin)-22 is an IL-10-related cytokine; its main biological activity known thus far is the induction of acute phase reactants in liver and pancreas. IL-22 signals through a receptor that is composed of two chains from the class II cytokine receptor family: IL-22R (also called **ZcytoR11**/CRF2-9) and IL-10Rbeta (CRF2-4), which is also involved in IL-10 signaling. In this report, we analyzed the signal transduction pathways activated in response to IL-22 in a rat hepatoma cell line, H4IIE. We found that IL-22 induces activation of JAK1 and Tyk2 but not JAK2, as well as phosphorylation of STAT1, STAT3, and STAT5 on tyrosine residues, extending the similarities between IL-22 and IL-10. However our results unraveled some differences between IL-22 and IL-10 signaling. Using antibodies specific for the phosphorylated form of MEK1/2, ERK1/2, p90RSK, JNK, and p38 kinase, we showed that IL-22 activates the three major MAPK pathways. IL-22 also induced serine phosphorylation of STAT3 on Ser(727). This effect, which is not shared with IL-10, was only marginally affected by MEK1/2 inhibitors, indicating that other pathways might be involved. Finally, by overexpressing a STAT3 S727A mutant, we showed that serine phosphorylation is required to achieve maximum transactivation of a STAT responsive promoter upon IL-22 stimulation.

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:472929 CAPLUS
DOCUMENT NUMBER: 135:75756
TITLE: Human cytokine zcyto18, sequence, diagnostic and therapeutic uses
INVENTOR(S): Presnell, Scott R.; Kindsvogel, Wayne
PATENT ASSIGNEE(S): Zymogenetics, Inc., USA
SOURCE: PCT Int. Appl., 167 pp.

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

CODEN: PIXXD2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|----------|
| WO 2001046422 | A1 | 20010628 | WO 2000-US35308 | 20001222 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1242600 | A1 | 20020925 | EP 2000-986744 | 20001222 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |

PRIORITY APPLN. INFO.:
US 1999-471767 A 19991223
US 2000-250841P P 20001201
WO 2000-US35308 W 20001222

AB The present invention provides the cDNA and protein sequence of human cytokine zcyto18. The zcyto18 is mapped in chromosome 12 (12q14-q24.3) and the tissue and cell line distribution of cytokine zcyto18 are described. The polypeptides can be used for stimulating the proliferation and development of hematopoietic cells in vitro and in vivo. The present invention also includes methods for producing the protein, uses therefor and antibodies thereto.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:417148 CAPLUS
DOCUMENT NUMBER: 135:32751
TITLE: Protein and cDNA sequences encoding human cytokine receptor **Zcytor16** and its therapeutic and diagnostic uses
INVENTOR(S): Presnell, Scott R.; Xu, Wenfeng; Kindsvogel, Wayne; Chen, Zhi
PATENT ASSIGNEE(S): Zymogenetics, Inc., USA
SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|----------|
| WO 2001040467 | A1 | 20010607 | WO 2000-US32703 | 20001201 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, | | | |

AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 2002012669 A1 20020131 US 2000-728911 20001201
 EP 1234035 A1 20020828 EP 2000-986256 20001201
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 PRIORITY APPLN. INFO.: US 1999-169049P P 19991203
 US 2000-232219P P 20000913
 US 2000-244610P P 20001031
 WO 2000-US32703 W 20001201

AB This present invention provides protein and cDNA sequences encoding human cytokine receptor **Zcytor16**. The cytokine receptor **Zcytor16** is expressed in lymphoid, placenta, spleen, tonsil and its gene has been mapped to human chromosome 6 (6q24.1-25.2). Cytokine receptor **Zcytor16** is a class II cytokine receptor and its binding to human IL-TIF could inhibit the proliferation and differentiation of hematopoietic cells. This invention also provides the test kit to detect genetic abnormality and cancer in patients.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 7 OF 8 MEDLINE DUPLICATE 2
 ACCESSION NUMBER: 2001459174 MEDLINE
 DOCUMENT NUMBER: 21396522 PubMed ID: 11481447
 TITLE: A soluble class II cytokine receptor, IL-22RA2, is a naturally occurring IL-22 antagonist.
 AUTHOR: Xu W; Presnell S R; Parrish-Novak J; Kindsvogel W; Jaspers S; Chen Z; Dillon S R; Gao Z; Gilbert T; Madden K; Schlutsmeyer S; Yao L; Whitmore T E; Chandrasekher Y;
 Grant F J; Maurer M; Jelinek L; Storey H; Brender T; Hammond A; Topouzis S; Clegg C H; Foster D C
 CORPORATE SOURCE: ZymoGenetics Inc., Seattle, WA 98102, USA.
 SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (2001 Aug 14) 98 (17) 9511-6. Journal code: 7505876. ISSN: 0027-8424.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 OTHER SOURCE: GENBANK-AY044429
 ENTRY MONTH: 200109
 ENTRY DATE: Entered STN: 20010816
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 Entered Medline: 20010920

AB IL-22 is an IL-10 homologue that binds to and signals through the class II cytokine receptor heterodimer IL-22RA1/CRF2-4. IL-22 is produced by T cells and induces the production of acute-phase reactants in vitro and in vivo, suggesting its involvement in inflammation. Here we report the identification of a class II cytokine receptor designated IL-22RA2 (IL-22 receptor-alpha 2) that appears to be a naturally expressed soluble receptor. IL-22RA2 shares amino acid sequence homology with IL-22RA1 (also known as IL-22R, **zcytor11**, and CRF2-9) and is physically adjacent to IL-20Ralpha and IFN-gammaR1 on chromosome 6q23.3-24.2. We demonstrate that IL-22RA2 binds specifically to IL-22 and neutralizes

IL-22-induced proliferation of BaF3 cells expressing IL-22 receptor subunits. IL-22RA2 mRNA is highly expressed in placenta and spleen by Northern blotting. PCR analysis using RNA from various tissues and cell lines showed that IL-22RA2 was expressed in a range of tissues, including those in the digestive, female reproductive, and immune systems. In situ hybridization revealed the dominant cell types expressing IL-22RA2 were mononuclear cells and epithelium. Because IL-22 induces the expression of acute phase reactants, IL-22RA2 may play an important role as an IL-22 antagonist in the regulation of inflammatory responses.

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:127019 CAPLUS

DOCUMENT NUMBER: 130:192770

TITLE: Cloning and cDNA sequences encoding mammalian cytokine

receptor-11

INVENTOR(S): Lok, Si; Adams, Robyn L.; Jelmsberg, Anna C.; Whitmore, Theodore E.; Farrah, Theresa M.

PATENT ASSIGNEE(S): Zymogenetics, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

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PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 9907848 | A1 | 19990218 | WO 1998-US15847 | 19980730 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 5965704 | A | 19991012 | US 1997-906713 | 19970805 |
| AU 9886737 | A1 | 19990301 | AU 1998-86737 | 19980730 |
| EP 1003863 | A1 | 20000531 | EP 1998-938144 | 19980730 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2001512680 | T2 | 20010828 | JP 2000-506333 | 19980730 |
| PRIORITY APPLN. INFO.: US 1997-906713 A 19970805 | | | | |
| WO 1998-US15847 W 19980730 | | | | |
| AB Novel receptor polypeptides (Zcytor11), polynucleotides encoding the polypeptides, and related compns. and methods are disclosed. The polypeptides comprise an extracellular domain of a cell-surface receptor that is expressed in pancreas, small intestine, colon and thymus. Zcytor11 , like all known class II receptors except interferon-.alpha..beta. receptor .alpha.-chain, has only a single class II cytokine receptor module in its extracellular domain, and appears to be a receptor for a helical cytokine of the interferon/interleukin-10 class. Zcytor11 was cloned by screening a pancreatic islet cell cDNA library with a probe designed from expressed sequence tag LISF104376. The gene was mapped to human chromosome 1. The polypeptides may be used within methods for detecting ligands that promote the proliferation and/or | | | | |

differentiation of these organs.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
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